

A SHUTTERED RECEPTACLE FOR A PROTECTIVE DEVICE

ABSTRACT OF THE INVENTION

The present invention is a protection device that is coupled to a power source In an electric power distribution system. The protection device is configured to protect a portion of the power distribution system from at least one fault condition. The device includes line terminals configured to be coupled to the power source when a proper wiring condition is effected. A receptacle member includes receptacle openings configured to accommodate plug contact blades. Receptacle contacts are disposed in the receptacle member and coupled to the line terminals. An electrical connection is established between the receptacle contacts and the line terminals. At least one protective shutter is movable between a closed position and an open position. The at least one protective shutter is disposed between the receptacle openings and the receptacle contacts in the closed position to prevent the plug blades from making contact with the receptacle contacts. A mis-wiring sensor is coupled to the line terminals. The mis-wiring sensor is configured to sense the proper wiring condition and actuate the protective shutter in response thereto, such that the protective shutter moves from the closed position to the open position. After which, the plug blades are permitted to make contact with the receptacle contacts upon insertion of the plug blades into the receptacle openings.